

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No: To Be Assigned
Applicant: Toshifumi Nakatani et al.
Filed: Herewith
Title: SEMICONDUCTOR DIFFERENTIAL CIRCUIT, OSCILLATION APPARATUS,
SWITCHING APPARATUS, AMPLIFYING APPARATUS, MIXER APPARATUS
AND CIRCUIT APPARATUS USING SAME, AND SEMICONDUCTOR
DIFFERENTIAL CIRCUIT PLACEMENT METHOD
TC/A.U.:
Examiner:

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98 and to the duty of disclosure set forth in 37 C.F.R. § 1.56, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO 1449 (RP) submitted herewith. A copy of each of the listed references is also enclosed.

Although the information submitted herewith may be "material" to the Examiner's consideration of the subject application, this submission is not intended to constitute an admission that such information is "prior art" as to the claimed invention.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

The following references are not in the English language:

- 1) JP 11-501466
- 2) JP 8-17847
- 3) JP 8-316420

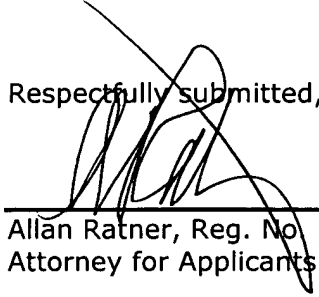
References 1) and 2) include a U.S. corresponding patent.

Reference 3) includes an English language abstract and partial translation.

References 1) and 3) are not in the English language, but a "concise explanation" under 37 CFR Section 1.98(a)(3) is set forth in the background portion of the above specification on page 4.

This Information Disclosure Statement is being filed concurrently with the above-referenced application.

Respectfully submitted,



Allan Ratner, Reg. No. 19,717
Attorney for Applicants

AR/dlm
Enclosures: PTO Form 1449
(6) References

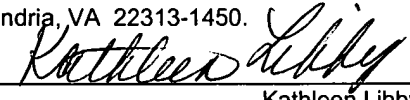
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I hereby certify that this paper and fee are being deposited, under 37 C.F.R. § 1.10 and with sufficient postage, using the "Express Mail Post Office to Addressee" service of the United States Postal Service on the date indicated above and that the deposit is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Kathleen Libby

Substitute for Form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	To Be Assigned
Filing Date	Herewith
First Named Inventor	T. Nakatani et al.
Art Unit	
Examiner Name	
Attorney Docket No.	MTS-3482US

SHEET 1 of 2

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-5,681,761 (corresponds to JP 11-501466)	10/28/1997	Kim	Entire Document
		US-5,485,029 (corresponds to JP 8-017847)	1/16/1996	Crabbé	Entire Document
		US-			
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		JP 11-501466 (corresponds to US 5,681,761)	2/2/1999	Kim	Entire Document	<input type="checkbox"/>
		JP 8-316420 (w/abstract & partial translation)	11/29/1996	Hitachi Ltd	Entire Document	<input type="checkbox"/>
		JP 8-17847 (corresponds to US 5,485,029)	1/19/1996	IBM	Entire Document	<input type="checkbox"/>
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Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

¹Applicant's unique citation designation number (optional).

²See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).

⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

⁶Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	To Be Assigned
Filing Date	Herewith
First Named Inventor	T/ Malatamo et al.
Art Unit	
Examiner Name	
Attorney Docket No.	MTS-3482US

SHEET 2 of 2

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		M. Tiebout, "Low-Power Low-Phase-Noise Differentially Tuned Quadrature VCO Design in Standard CMOS", IEEE Journal of Solid-State Circuits, vol. 36, no. 7, pp. 1018-1024, July 2001.	<input type="checkbox"/>
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Examiner Signature		Date Considered	
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¹Applicant's unique citation designation number (optional).

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